



Air Force Studies and Analyses Agency

Analysis Management Process 1996

Timely Support for Air Force Decision Makers

Purpose

- **Formally highlight key USAF issues**
- **Prioritize key issues for analysis**
- **Match planned analyses with available resources**
- **Manage the plan to insure responsiveness**

Overview

- **AFSAA Background**
 - Analysis Management Process description
 - Timelines
 - FY96 Analysis Topics
 - Proposed Study Areas

The only dedicated
blue-suit analysis
team in the Pentagon

AFSAA's Historic Role in DC

- Created in 1965 to
 - Balance growing OSD analytic emphasis
 - Focus USAF study process
- 1965-1989: Direct CSAF support on key force and resource issues
- 1989-1991: CV support on same key issues
- 1991-1993: FOA to PE for POM analysis
- 1993-1995: FOA to XOM for MS&A issues

Making an impact
from the bottom up

Where We've Lived in the Building

CSAF
AF/CV



1965-88

Assigned: 180-300

CSAF

AF/CV



1989

160

CSAF

AF/CV

AF/PE



1991

140

CSAF

AF/CV

AF/XO

XOM



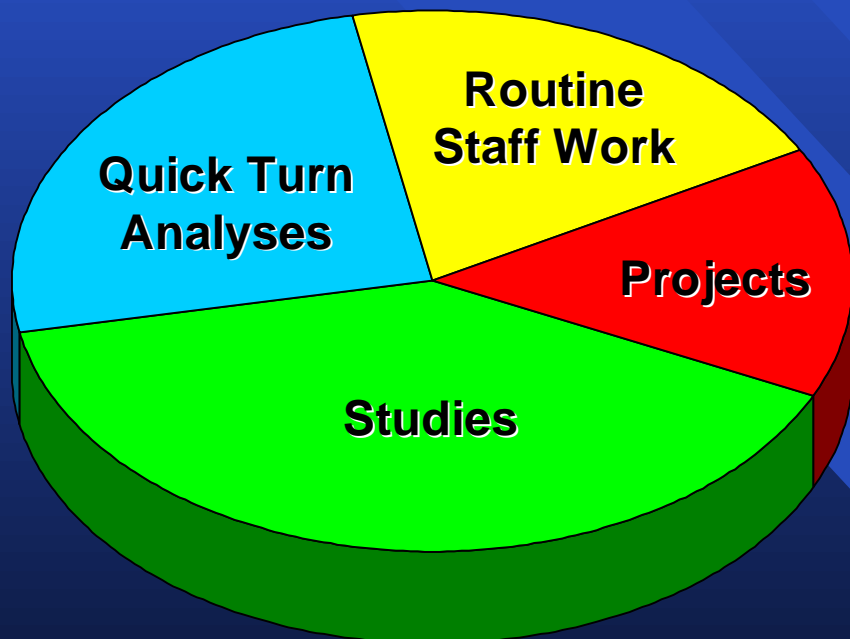
1993

79

Basic AFSAA Structure



Analyst Workload Breakout*

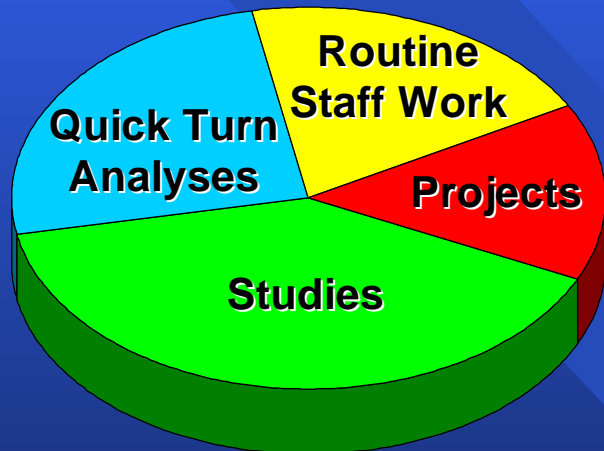


- **Study:** A long-term analysis, described in a formal study plan
- **Quick-Turn:** A short term analysis leveraging results and data from on-going long-term studies
- **Routine Staff Work:** Typical Action Officer Activities (package coord, meetings, etc)
- **Project:** Non-analytic work performed in support of the AFSAA mission

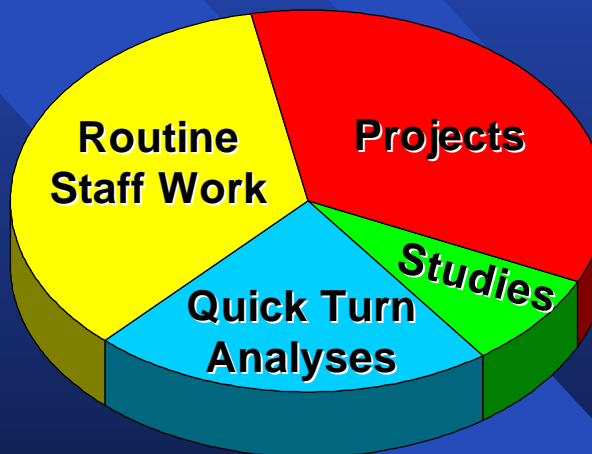
* Typical line analyst. For annual planning purposes

Analytic Workload by Position

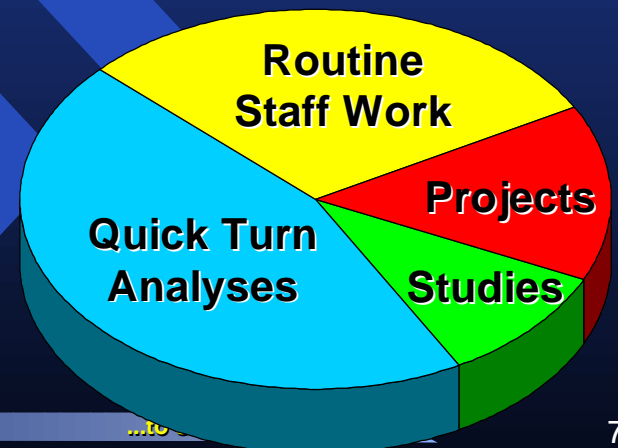
**Typical Line Analyst
(35 People)**



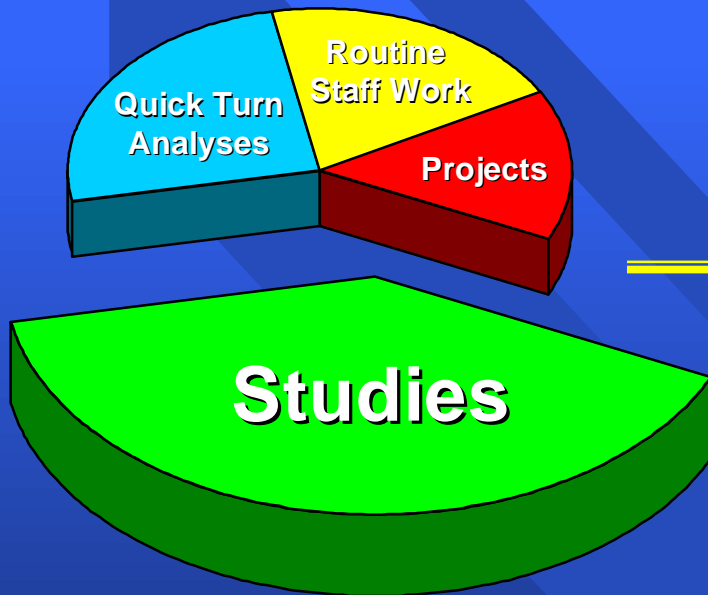
**Branch Chief
(11 People)**



**Resource Analyst
(FY97: 13 People;
0 Today)**

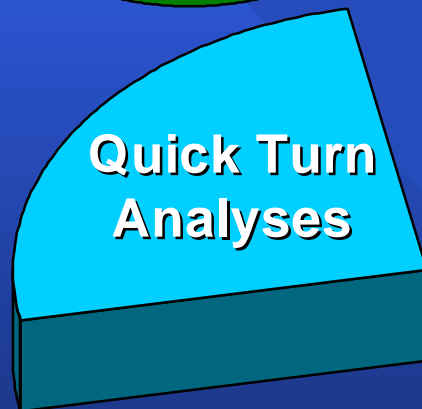
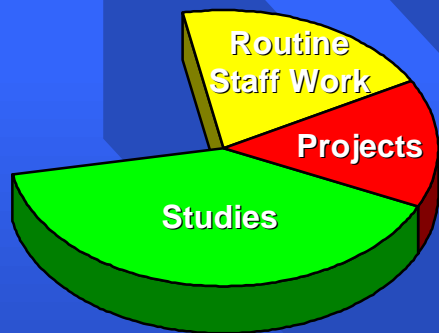


Studies



- **Purpose:** Provide in-depth insight into a specific system or issue
- **Scope:** Months to years
- **Managing Mechanism:** The Analysis Management Process

- **Benefit to Customers:** Detailed insight into capabilities or performance of study area. Published report, briefing. Cheaper, *more operationally meaningful* than contractor analysis.
- **Benefit to AFSAA:** Long term analyses are AFSAA's "seed corn." Provides insight and data that support quick-turn analyses.
- **Recent Examples:** Joint Tactical Electronic Warfare Study (JTAEWS), AMRAAM P3I COEA, Two Nearly-Simultaneous MRCs, Conventional Weapons Program Assessment, ICBM Study, TMD Capstone COEA

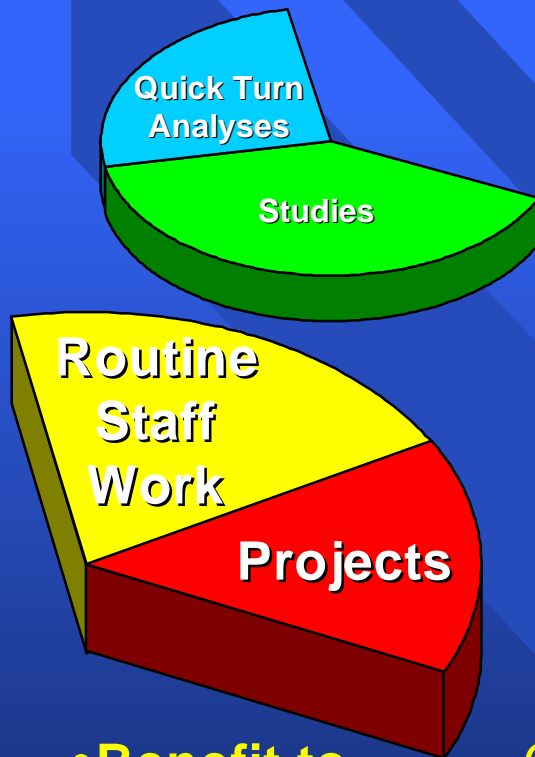


Quick Turn Analyses

- **Purpose:** Provide quick-response insight into a specific system or issue
- **Scope:** Hours to months
- **Managing Mechanism:** In house. Resource Analysis Division. Direct interface with Customers

- **Benefit to Customers:** Quick turn-around on critical, time-sensitive issues. Analytic foundation to answers.
- **Benefit to AFSAA:** Exposure to current issues influences long-term studies.
- **Recent Examples:** ASRAAM Quick-Look, F-22 Force Mix Options, Bosnian Targeting Options, Bomber PGM Quick-Look, *Bosnia/ JSTARS Demonstration, Satellite Constellation Q-L*

Staff Work and Projects



- **Purpose:** Cost of doing business in the Pentagon
- **Scope:** Ongoing
- **Managing Mechanism:** In house.

• **Benefit to Customers**

Contributes to quality of overall Air Staff product

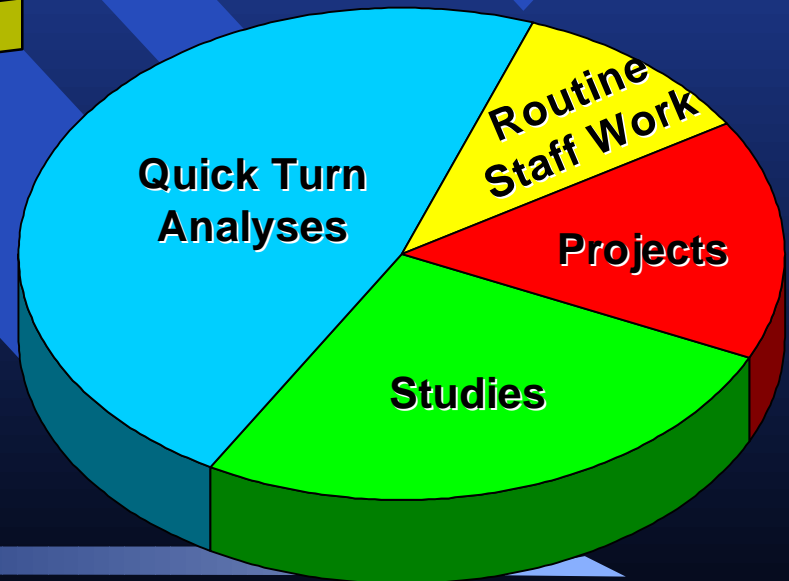
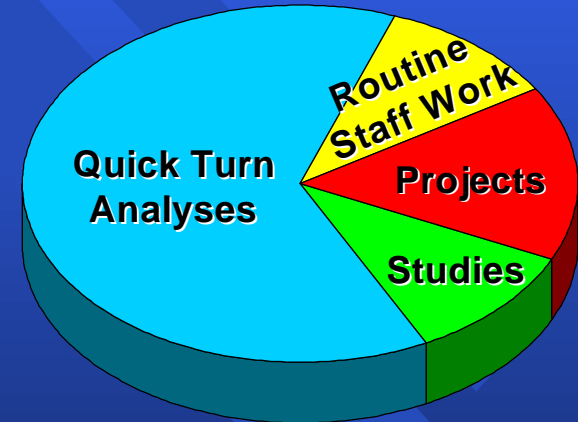
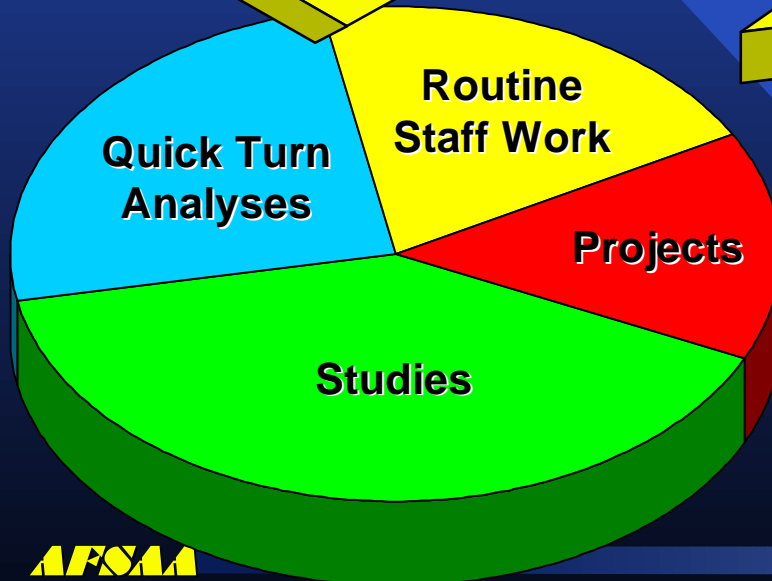
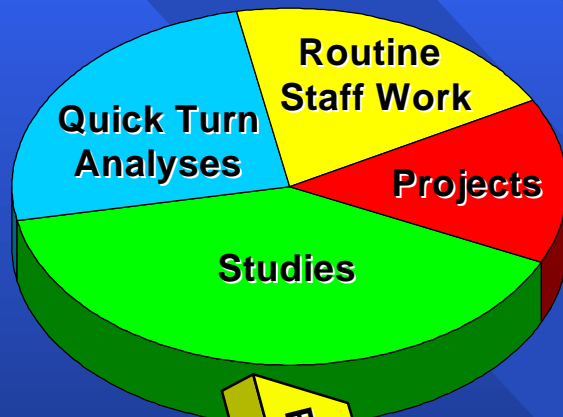
• **Benefit to AFSAA**

Exposure to current issues. Control of key USAF models

• **Recent Examples:**

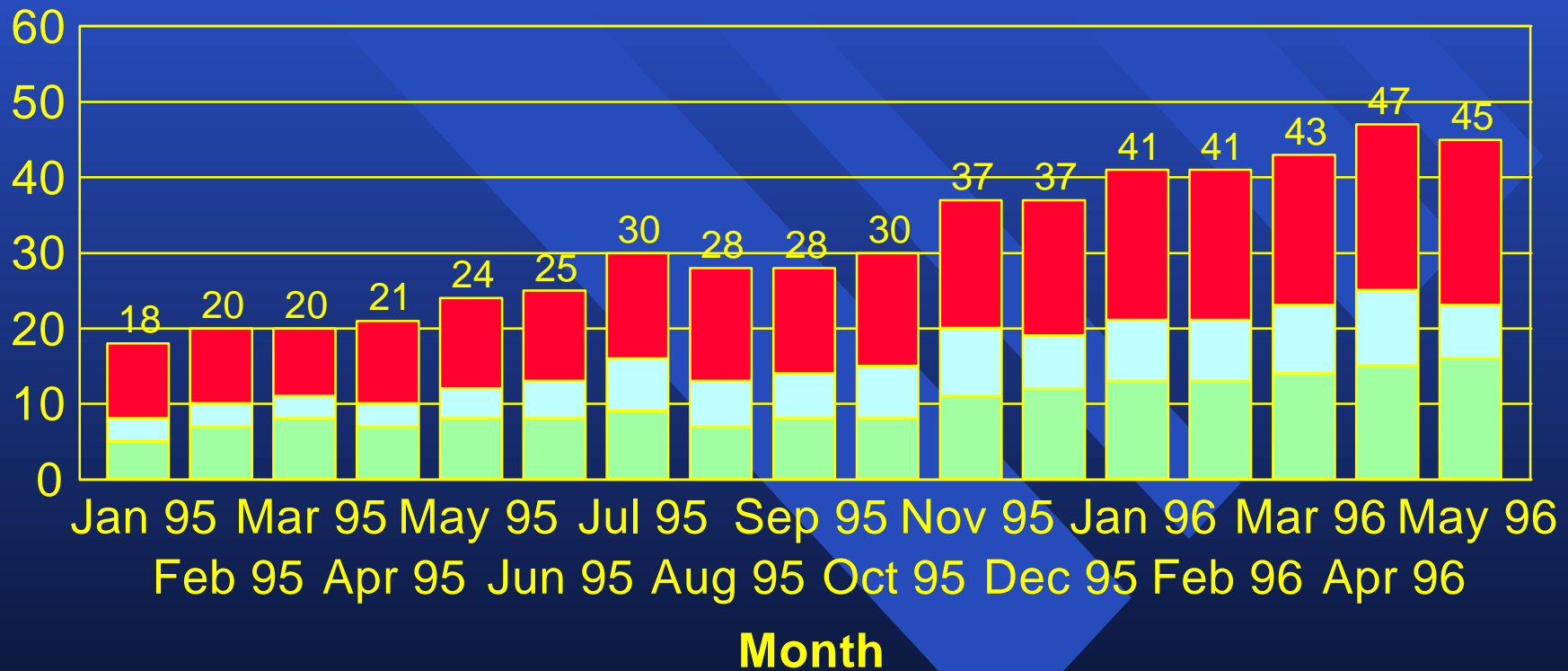
Industry's Analysis, Modeling & Simulation Senior Advisory Committee (AMASSC), Model management, ORD / MNS Coordination, Wargame Assistance, Industry Briefs, DARO Projects Coord

Adjusting the Analytic Workload



Workload/Composition Metric Force Application Division

Work in Progress



As of 31 May 96

■ Studies ■ Analyses ■ Projects

AFSAA's Primary FY95 Studies

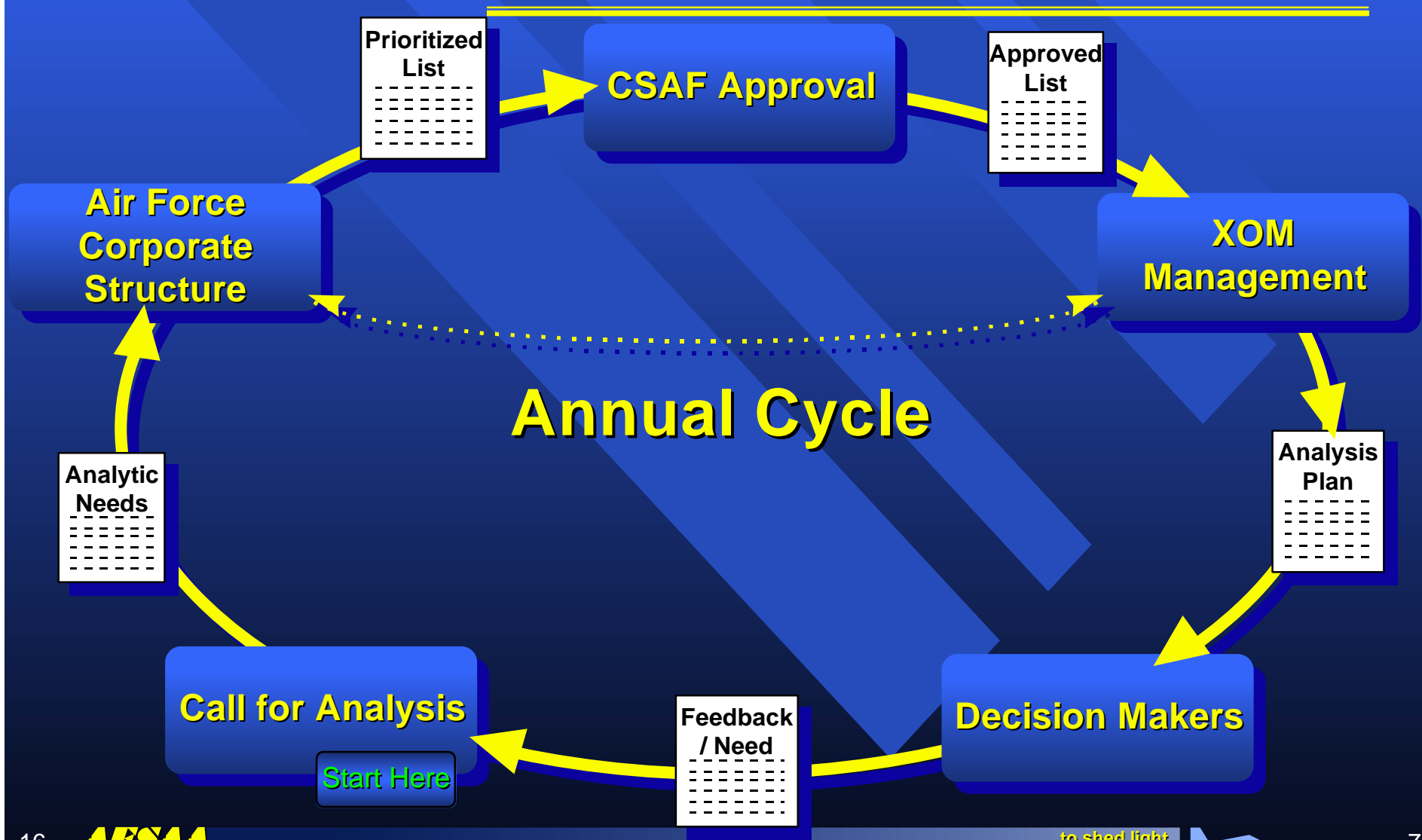
<u>STUDY</u>	<u>CUSTOMER</u>
• Stressed Systems	CSAF
• Battle of Khafji	CSAF
• Bosnian Sensors	CSAF
• AMRAAM P3I	XOR, ACC/DR, AQL
• F-22	AQ
• C-17	XOF
• Munitions	PE
• Bomber Reqts	XOX, PA&E
• JAST Requirements	JAST PO
• JTAEWS	XOR, ACC/DR
• Vigilant Warrior	CENTCOM/J-3
• NIMBLE DANCER	AF/CV
• Intratheater Lift	J-4, XOF
• UAV Architecture	DARO, XOX
• Attack Ops	TA, ACC/DR
• Aircrew Ratios	XOM
• JASSM COEA	AQ, XOR
• DSP Options	XOR

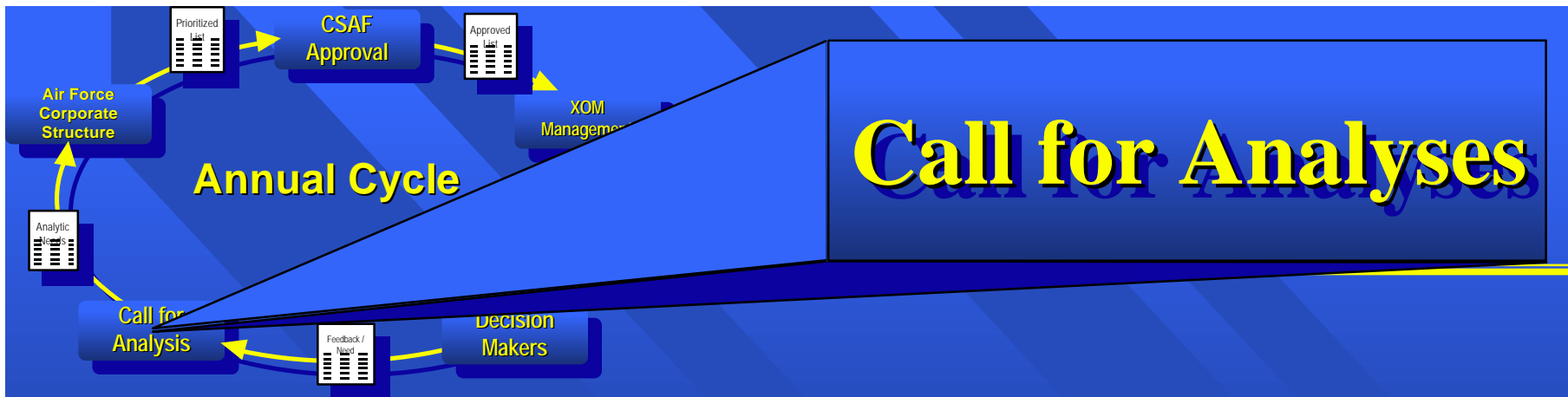
<u>STUDY</u>	<u>CUSTOMER</u>
• PGM Effectiveness	XOR
• TAD BMC4I	TA, XOR
• TRIAD Force Struct	XOX
• BPI COEA	TA, ACC/DR
• Weapons Options	AQL
• NBC Effects	XOX
• OSA Force Structure	XOF
• Revolutionary Ideas	XO
• F-22 Quick Analysis	XOR
• C-130 ARC Mix	XOF
• Battlefield Aware	CSAF
• Weather	XOW
• Anti-Armor MAA	PA&E
• ABL Campaign	XOX
• MILSATCOM COEA	XOF
• ASRAAM	XO, AQ
• Cruise Missile Def	TA, XOR, AQP

Overview

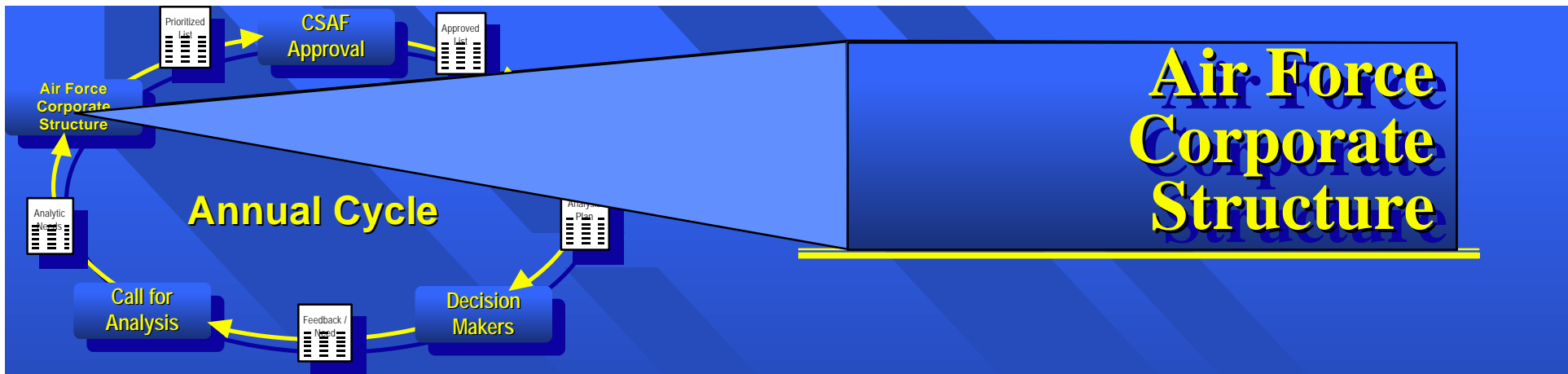
- AFSAA Background
- **Analysis Management Process Description**
- Timelines
- FY96 Analysis Topics
- Proposed Study Areas

Analysis Management Plan Process

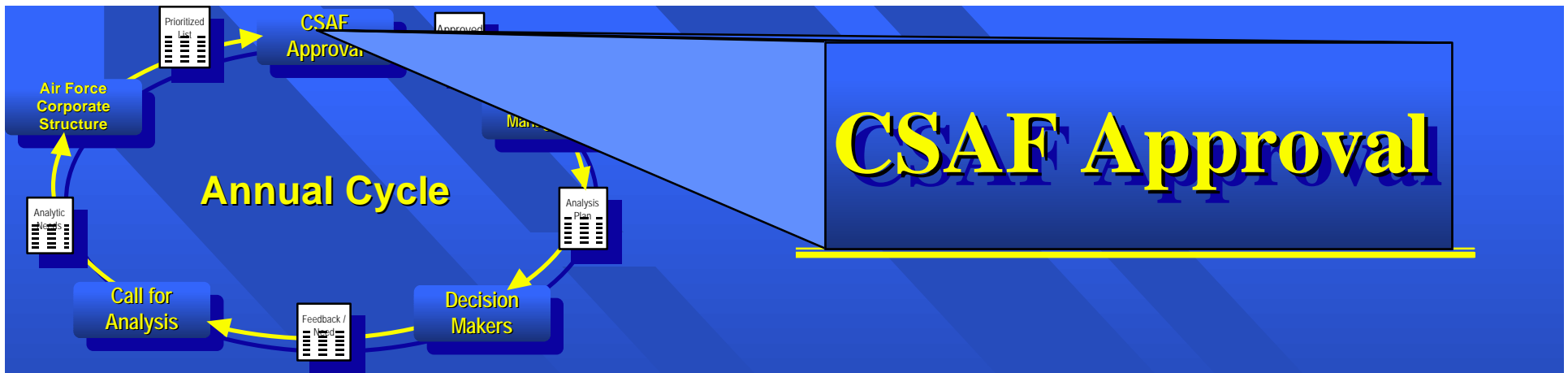




- **Purpose:** Solicit inputs for analytic support
- **Target:** Headquarters Air Force
- **Method:** Look ahead for impact issues
- **Focus:** Encompasses a variety of potential analyses including:
 - CSAF Guidance
 - COEAs
 - MAP
 - POM / JWCA's
 - Acquisition
 - AF Panels
- **Output:** Comprehensive list of key issues requiring analysis



- **Purpose:** Prioritize Air Staff analysis needs
- **Method:** Analytic Hierarchy Process (AHP)
- **Focus:** Analyses of interest to USAF senior leadership
- **Product:** Prioritized list and Proposed AFSAA Study Plan



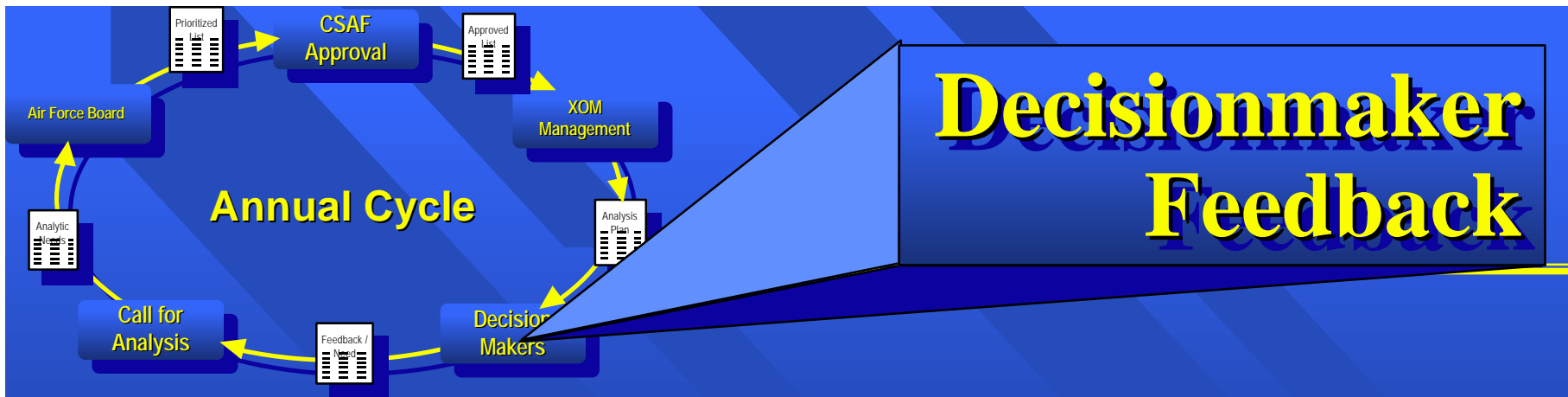
- **Purpose:**

- Inform the Chief of Air Staff recommendations
- Provide opportunity for direct CSAF feedback
- Obtain approval for annual plan

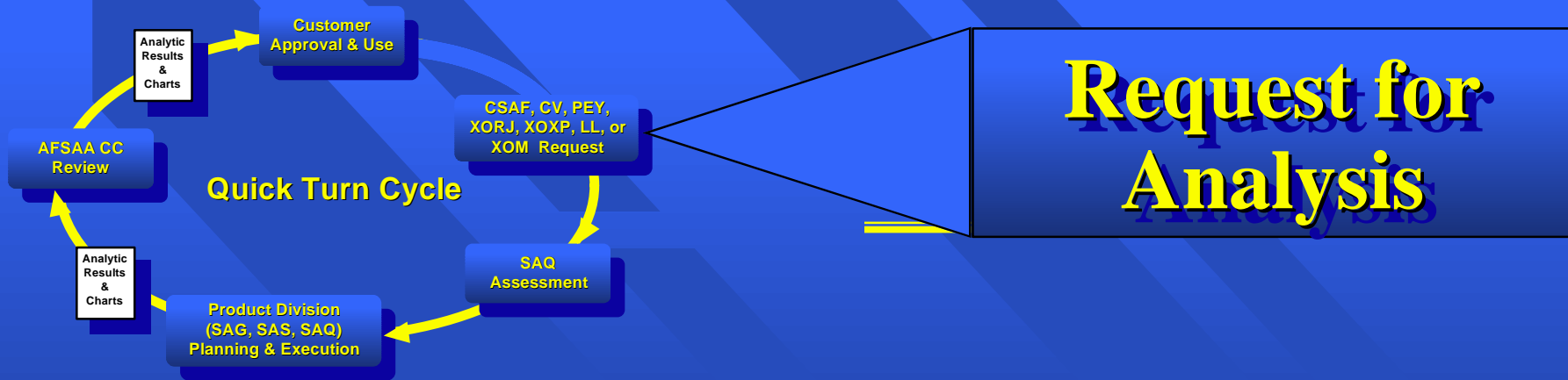


- Purpose: Execute Analysis Plan
- Responsibilities
 - Manage “Pop-up” Issue tasking
 - Resolve conflicts
 - Redline prioritized list based on available resources
- Focus: Air Force Studies and Analyses Agency
- Product: Decision-Aiding Analysis Products

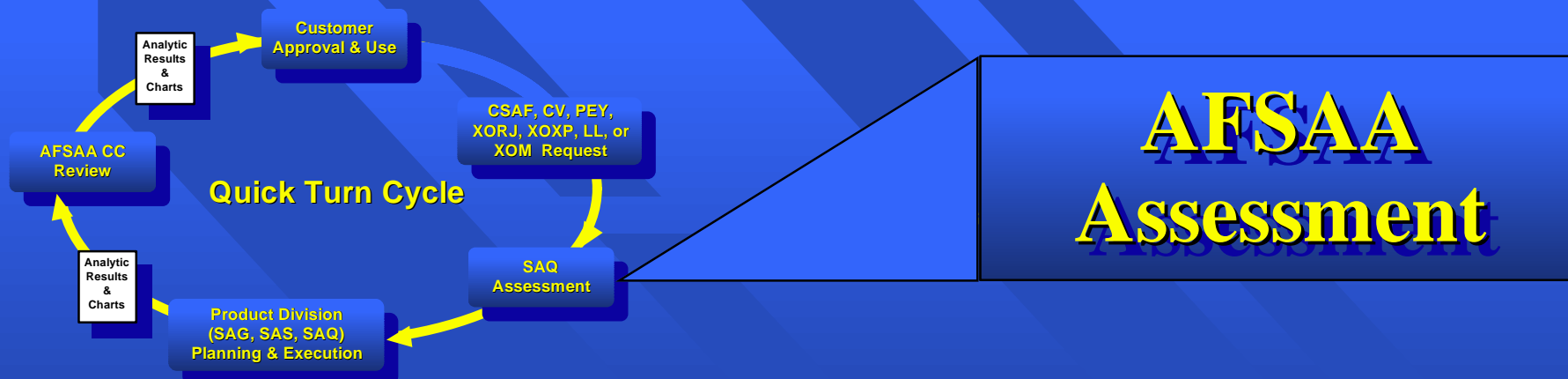
$$\frac{\text{Total Prioritized Studies}}{\text{Available Analysts}} = \text{Analyzed Issues}$$



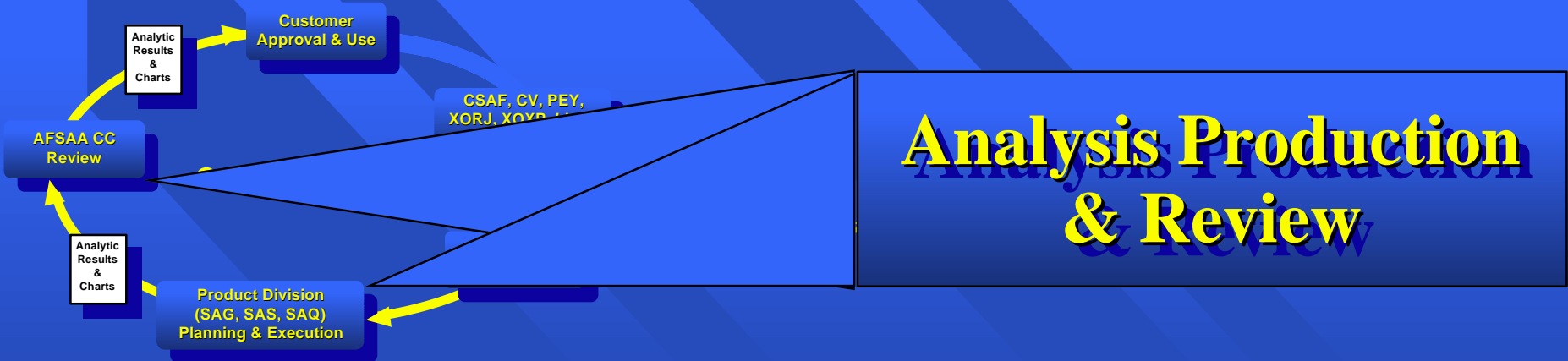
- **Purpose:** Assess quality of provided analyses
- **Method:**
 - Formal briefing feedback
 - Report coordination / feedback
 - Questionnaires
- **Focus:** Ongoing or recently completed analyses
- **Product:** Input to next AMP cycle



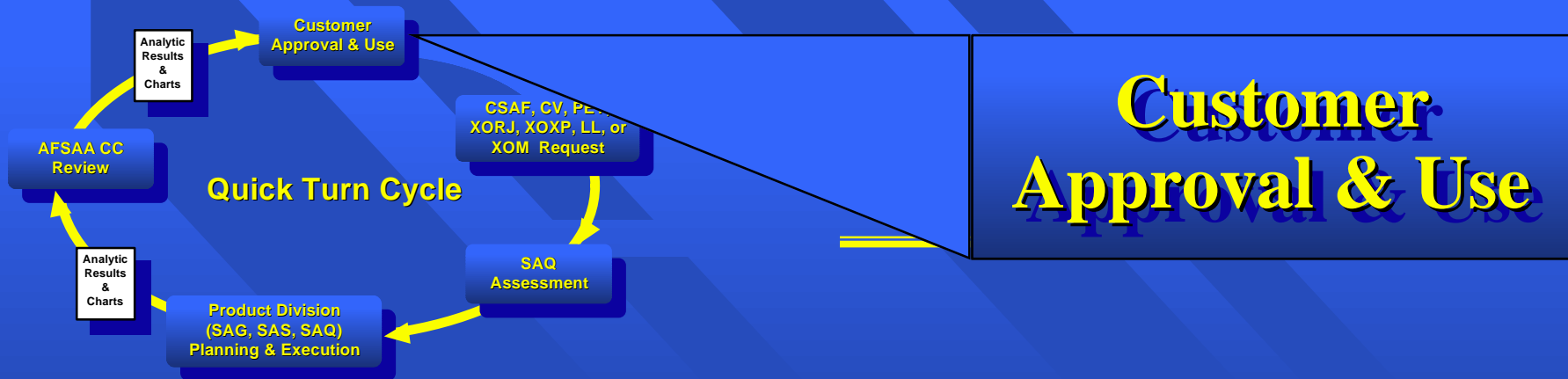
- **Purpose:** Rapid production of analytic insight
- **Target:** CSAF, CV, PEY, XORJ, XOXP, LL, XOM
- **Method:** Written or verbal request
- **Focus:** Operational capabilities assessments for POM, JWCAs, & MAPs
- **Output:** Request for analytic support



- **Purpose:** Determine capability to provide rapid, analytic results
- **Method:** Leadership assessment
- **Focus:** Existing quick-turn tools, study efforts, and personnel resources
- **Output:** Realistic assessments of Agency ability to produce needed analysis, and the resulting impacts on other efforts



- **Purpose:** Conduct analysis & review results
- **Method:** Intelligent thought supported by analytic tools
- **Focus:** Analytic plan development & execution
- **Output:** Graphical presentation of key results; leadership approval (Div Chief, AFSAA CC)



- **Purpose:** Obtain customer approval of results; assist customer in using results
- **Target:** CSAF, CV, PEY, XORJ, XOXP, LL, XOM
- **Method:** Direct interface
- **Output:** Relevant & timely analysis

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Analysis Management Process Annual Cycle Startup

- **Air Force Board (FY96):** 11 Dec 95
 - **Air Force Council:** TBD
 - **List and Plan to CSAF:** 2 Jan 96
-
- **Published Study Plan:** 15 Jan 95
 - **Call for Analyses:** 1 Jun 96
 - **Air Force Corp Structure:** 1 Aug 96
 - **List and Plan to CSAF:** 1 Sep 96
 - **Implement:** 1 Oct 96

First Full
Annual Cycle



Analysis Management Process Quick-Turn Capability Startup

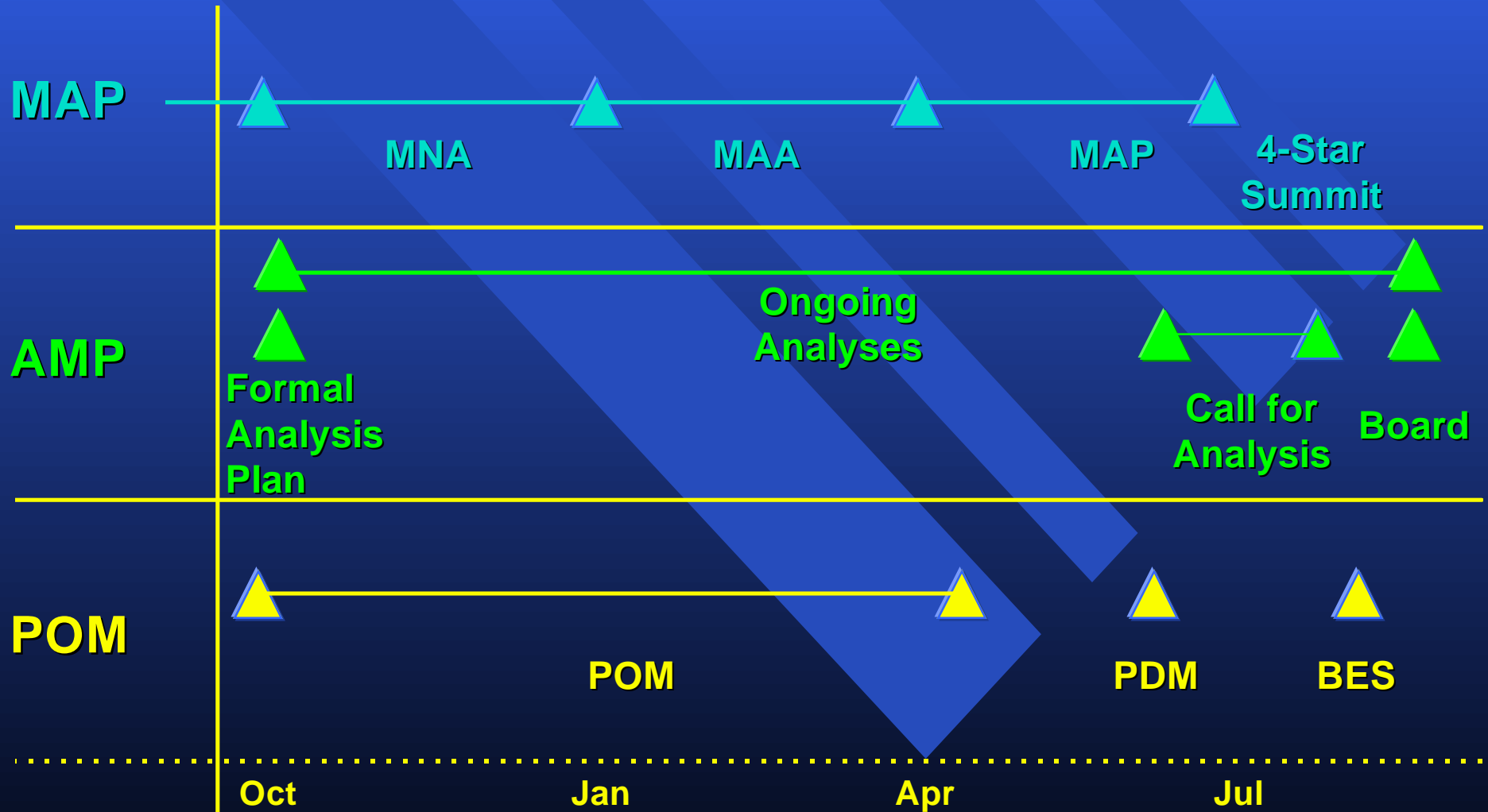
- **Initial Staffing:** 11 Dec 95
- **Limited Capability:** 1 Mar 96

- **Full Staffing:** Nov 96
- **Completion of Training:** Jan 97
- **Full-up Capability:** Jan 97

Call for Analysis Topics- FY97

- **Call to be issued June 96**
- **Primary mechanism Unclassified World Wide Web**
 - AFSAA Home Page
 - <http://www.afsaa.hq.af.mil>
- **Classified via mail and XO & PE Secret Lans**
- **Pop-up issues handled by Capabilities Assessment Division (SAQ) (personal contact)**
 - Rapid literature search & feasibility assessment
 - Phone (703) 695-0576

Long-Term Fit



Overview

- AFSAA Background
- Analysis Management Process description
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- **FY96 Analysis Topics**
- Proposed Study Areas

FY96 Key Issue Areas

• AF Corporate Structure - based

Mission Panels

Air Superiority

- Fighters
- TAD
- Weapons

Power Projection

- Aircraft
- Weapons

Global Mobility

- Airlift
- Tankers
- Infrastructure

Info Dominance

- Info War
- EW
- Recce

Space Superiority

- Satellites
- Spacelift
- Nuclear

Mission Support Panels

RDT&E

- ECM Test
- Ops Test
- Merit

Logistics

C4I

- BMC4ISR
- Info Sec

Installation Support

Personnel / Training*

*Exception

FY96 Key Issues

- **Providing Air & Space Power to meet national security requirements in a resource constrained environment**
 - Fighter Force
 - Bomber Force
 - Theater Air Defense
 - Mobility
 - Precision Munitions
 - Information Warfare
 - Electronic Warfare
 - C4ISR
 - Counter Proliferation
 - Roles and Missions
- **Providing the most cost-effective solutions**
 - Airframes
 - Munitions
 - Systems
- **Evaluating future Air Power ideas**

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- Normal Ops
- Accelerated Ops Tempo
- Surge Ops Tempo

FY96 Planned* Studies

Study Title	Customer	Outside Funding	Schedule
Multi-Panel			Oct Jan Apr Jul Oct Jan
• 2 MRC Study	XO		
• Force Structure	PE		
• POM / JWCA Analyses	PE, XOR	\$500K	
• Air Power Effectiveness	CSAF, XO		
Air Superiority			
• F-22 Phase I	AQP		
• F-22 Phase II (Campaign)	AQP		
• BPI COEA	XOR, AQP, ACC/DR	\$270K	
• TMD Capstone COEA	XOR, AQP		
• Tri-Service Attack Ops	XOR, DAMP/FD, N88		
• USAF Role in CEC	CSAF, XORS		
• Cruise Missile Def	XOR, AQP, AQL	\$115K	
• Joint Cruise Missile Def	XO, OSD, J-8		
• Mountain Top, Phase II	XOR, AQP, OUSD(A&T)	\$240K	

*Planned: Previously commissioned or funded

Oct Jan Apr Jul Oct Jan

- Normal Ops
- Accelerated Ops Tempo
- Surge Ops Tempo

FY96 Planned* Studies

(Cont'd)

Study Title	Customer	Outside Funding	Schedule
Power Projection			Oct Jan Apr Jul Oct Jan
• Battle of Khafji	CSAF	\$500K	
• Hard / Deeply Buried Tgts	XOR, PA&E		
• JAST Support	XOR, AQP, JAST JPO		
• Deep Attack Weapons	XOX		
• Bosnia Air Campaign	XO		
Global Mobility			
• C-130 Active / ARC Mix	XOF		
• Mobility System Changes	AQ, XOF		
• Airfield Accessibility	XOF		
• Operational Loadouts	USD(A&T), PA&E, MTMC		
Information Dominance			
• UAV Force Mix	XOR, DARO		
• Extended EC	AQP, ACC/DR		
• UAV Effectiveness	XOR, DARO	\$250K	
			Oct Jan Apr Jul Oct Jan

- Normal Ops
- Accelerated Ops Tempo
- Surge Ops Tempo

FY96 Planned* Studies

(Cont'd)

Study Title	Customer	Outside Funding	Schedule
Space Superiority			Oct Jan Apr Jul Oct Jan
• IMINT System Force Mix	XOR, DARO		
C4I			
• TAD BMC4I CONOPS	XOR, ACC/DR	\$215K	
• CEC Integration Study	XOR, PEO TAD (C)	\$150K	
• TAD Data Transmission	XOR, ESC/XRP	\$50K	
RDT&E			
• Requirements to Test B-1 ECM (Phase I)	AFPEO/ST, XOR, AQ	\$620K	
• Requirements to Test B-1 ECM (Phase II)	TE, ACC/DR		
• B-1 ECM (Phase II)	AFPEO/ST, XOR, AQ		
• B-1 ECM (Phase II)	TE, ACC/DR		
Personnel / Training			
• Stressed Systems (Ph I)	CSAF		
• Stressed Systems (Ph II)	CSAF		

*Planned: Previously commissioned or funded

Oct Jan Apr Jul Oct Jan

- Normal Ops
- Accelerated Ops Tempo
- Surge Ops Tempo

FY96 Planned* Studies

(Cont'd)

Study Title	Customer	Outside Funding	Schedule					
Other			Oct	Jan	Apr	Jul	Oct	Jan
<ul style="list-style-type: none"> AQL Study SAF / IA Study 	AQL SAF / IA	\$160K						

FY96 Study Plan

<u>STUDY</u>	<u>CUSTOMER</u>	<u>STUDY</u>	<u>CUSTOMER</u>
Multi-Panel		Power Projection	
• 2 MRC Study	XO, AQ	• Battle of Khafji	CSAF
• Force Structure	PE	• Hard / Deeply Buried Tgts	XOR, A&T
• WMP-5 Attrition Update	XOX	• JAST Support	XOR, AQP, JAST JPO
• POM / JWCA Analyses	PE, XOR	• Deep Attack Weapons	XOX
• Air Power Effectiveness	CSAF, XO	• Bosnia Air Campaign	XO
Air Superiority		Global Mobility	
• F-22 Phase I	AQP	• C-130 Active / ARC Mix	XOF
• F-22 Phase II (Campaign)	AQP	• Mobility System Changes	AQ, XOF
• BPI COEA	XOR, ACC/DR	• Airfield Accessibility	XOF
• TMD Capstone COEA	XOR, AQP	• Operational Loadouts	PA&E, MTMC
• Attack Operations	XOR, ACC/DR, JWCA	Information Dominance	
• USAF Role in CEC	CSAF	• UAV Force Mix	XOR, DARO
• Cruise Missile Def	XOR, AQP, AQL	• Extended EC	AQP, ACC/DR
• Mountain Top, Phase II	XOR, AQP, OUSD(A&T)	• UAV Effectiveness	XOR, DARO

- Normal Ops
- Accelerated Ops Tempo
- Surge Ops Tempo

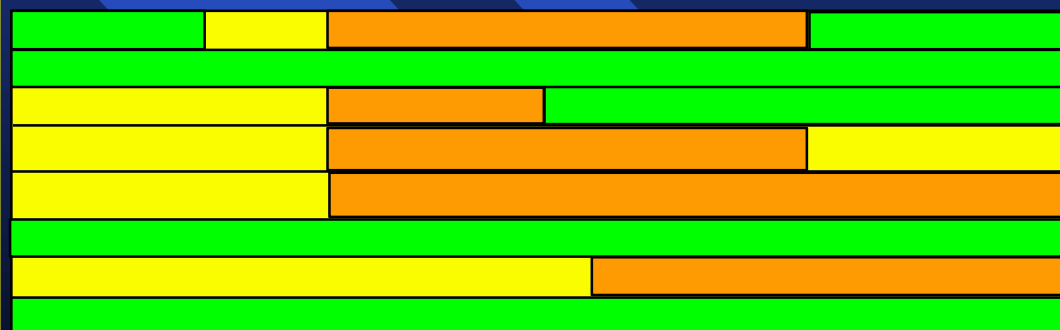
FY96 Study Plan (cont'd)

<u>STUDY</u>	<u>CUSTOMER</u>	<u>STUDY</u>	<u>CUSTOMER</u>
Space Superiority		RDT&E	
• RISOP	XOF, OSD, DIA, XOR, DARO	• Requirements to Test (B-1 ECM)	AFPEO/ST, XOR, AQ, TE, ACC/DR
• IMINT System Force Mix	XOR, DARO	Personnel / Training	
• Counter Proliferation	XOX	• Stressed Systems	CSAF
C4I		Other	
• TAD BMC4I CONOPS	XOR, ACC/DR	• AQL Study	AQL
• CEC Integration Study	XOR	• SAF / IA Study	SAF / IA
• TAD Data Transmission	XOR		

Analyst Expertise

- Campaign
- Electronic Warfare
- Air-to-Air
- Weapons / Force Structure
- Theater Air Defense
- Mobility
- Space / IW
- Nuclear Triad / Counter Pro

Analyst Availability



Oct Nov Dec Jan Feb Mar Apr May Jun Jul Aug Sep

Recommendations

- Endorse the Analysis Management Process
- Endorse the FY96 AFSAA Study Plan